Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table E5-	12: Summ	ary of Lowe	st Cost and S	secona Lowes	et Cost for Imp	acted Small v	Nater Systems S	serving <10,0	00 Persons		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Avg. Pop.	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
01001	1000	001	\$23,757	3a	\$151,031	\$10,590	\$29,391	4a	\$159,926	\$15,448	\$5.94
01004	4500	542	\$41,009	3a	\$190,362	\$24,412	\$51,989	4a*	\$192,259	\$35,227	\$2.28
01004		755	\$67,265	2a*	\$238,046	\$46,511	\$67,265	2a*	\$238,046	\$46,511	\$3.74
02005	3824	001	\$29,799	1a	\$188,221	\$13,389	\$31,370	2a	\$144,239	\$18,795	\$1.95
02005		002	\$33,948	3a	\$213,767	\$15,311	\$40,467	4a	\$211,501	\$22,028	\$2.22
02005		003	\$35,340	3a	\$213,767	\$16,703	\$42,470	4a	\$211,501	\$24,030	\$2.31
02005		004	\$39,052	3a	\$213,767	\$20,414	\$47,810	4a	\$211,501	\$29,370	\$2.55
02005		005	\$47,403	3a	\$213,767	\$28,766	\$59,825	4a	\$211,501	\$41,386	\$3.10
02005		800	\$29,799	1a	\$188,221	\$13,389	\$31,370	2a	\$144,239	\$18,795	\$1.95
02007	175		\$20,612	1a	\$145,410	\$7,935	\$21,288	2a	\$114,342	\$11,319	\$29.45
02012	567	001	\$61,499	3a	\$282,005	\$36,912	\$76,205	4a	\$267,599	\$52,875	\$27.12
02012		002	\$38,050	3a	\$190,362	\$21,453	\$47,719	4a	\$192,259	\$30,957	\$16.78
02012		003	\$52,958	3a	\$259,094	\$30,369	\$65,237	4a	\$248,764	\$43,548	\$23.35
02032	120	001	\$23,953	3a	\$145,176	\$11,296	\$30,053	4a	\$155,113	\$16,530	\$49.90
02033	2500	002	\$35,537	1b	\$201,491	\$17,971	\$38,458	2b	\$152,349	\$25,175	\$3.55
02033		003	\$61,749	3b	\$269,443	\$38,258	\$76,871	4b	\$252,742	\$54,835	\$6.17
02038	577	001	\$26,031	3b	\$154,667	\$12,546	\$32,084	4b	\$158,922	\$18,229	\$11.28
02043	90	001	\$16,353	1b	\$125,008	\$5,454	\$16,617	2b	\$99,539	\$7,938	\$45.43
02061	3200	001	\$232,339	5a	\$1,240,109	\$124,222	\$325,547	3a	\$1,376,633	\$205,526	\$18.15
02063	1200	002	\$33,660	1a	\$184,764	\$17,552	\$37,021	2a	\$141,825	\$24,656	\$7.01
02073	160	001	\$22,857	3b	\$160,708	\$8,846	\$27,114	4b	\$163,860	\$12,828	\$35.71
02093	25	001	\$18,440	3a	\$132,581	\$6,882	\$22,796	4a	\$144,758	\$10,176	\$184.40
02300	83	001	\$26,050	3a	\$140,271	\$13,820	\$33,464	4a	\$151,080	\$20,292	\$78.46
02367	50	001	\$47,378	3a	\$233,001	\$27,064	\$58,690	4a	\$227,313	\$38,872	QNI
02382	130	001	\$25,550	3a	\$146,502	\$12,777	\$32,301	4a	\$156,203	\$18,683	\$49.13
03002	5692	002	\$42,117	1a	\$225,655	\$22,443	\$42,117	1a	\$225,655	\$22,443	\$1.85
03021	150	001	\$17,468	3a	\$133,084	\$5,866	\$21,325	4a	\$145,172	\$8,668	\$29.11
03032	1500	003	\$57,230	3b	\$264,006	\$34,213	\$70,696	4b	\$248,298	\$49,049	\$9.54
03032		004	\$87,381	1a	\$369,218	\$55,192	\$100,151	2a	\$270,637	\$76,556	\$14.56
03067	220	001	\$33,137	3a	\$158,435	\$19,324	\$42,576	4a	\$166,013	\$28,102	\$37.66
03306	80	001	\$19,637	1a	\$136,613	\$7,726	\$20,541	2a	\$108,199	\$11,108	\$61.37
03362	300	001	\$25,253	3a	\$169,042	\$10,515	\$30,474	4a	\$174,733	\$15,240	\$21.04
03362		55-630285	\$23,985	1a	\$156,984	\$10,299	\$25,268	2a	\$122,425	\$14,595	\$19.99
03712	4500	001	\$22,625	3a	\$157,905	\$8,859	\$27,321	4a	\$165,577	\$12,885	\$1.26
04002	8435	002	\$135,023	3a	\$537,155	\$88,192	\$167,404	4a	\$477,357	\$125,786	\$4.00
04002		003	\$62,701	1a	\$303,615	\$36,231	\$69,952	2a	\$224,824	\$50,351	\$1.86
04002		005	\$21,508	1a	\$145,206	\$8,848	\$22,581	2a	\$114,200	\$12,624	\$0.64
04002		006	\$61,886	3a	\$269,061	\$38,428	\$77,480	4a	\$256,958	\$55,077	\$1.83
04002		009	\$25,586	1a	\$166,540	\$11,067	\$26,878	2a	\$129,099	\$15,623	\$0.76
04002		010	\$18,709	3a	\$145,304	\$6,041	\$22,372	4a	\$155,217	\$8,839	\$0.55

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table ES-	12: Summ	ary of Lowe	st Cost and S	second Lowes	t Cost for Imp	acted Small V	Nater Systems S	serving <10,0	00 Persons		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Ava Pon	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
	Avg. 1 op.				•						
04002		011	\$18,763	1a	\$137,205	\$6,801	\$19,241	2a	\$108,613	\$9,772	\$0.56
04002		012	\$19,292	3a	\$143,012	\$6,823	\$23,367	4a	\$153,334	\$9,999	\$0.57
04003	500	001	\$80,918	3a	\$296,798	\$55,042	\$103,192	4a	\$279,761	\$78,801	\$40.46
04011	550	001	\$25,690	3a	\$165,727	\$11,241	\$31,304	4a	\$172,008	\$16,307	\$11.68
04030	825	004	\$28,771	3a	\$183,958	\$12,733	\$34,697	4a	\$186,995	\$18,394	\$8.72
04034	3900	003	\$50,486	1a	\$249,582	\$28,727	\$56,346	2a	\$187,090	\$40,034	\$3.24
04038	164	001	\$23,751	3a	\$151,010	\$10,585	\$29,383	4a	\$159,909	\$15,442	\$36.21
04065	65	001	\$19,969	3a	\$137,884	\$7,947	\$24,692	4a	\$149,118	\$11,691	\$76.80
04300	150	002	\$17,852	3a	\$130,539	\$6,471	\$22,066	4a	\$143,079	\$9,592	\$29.75
04341		00	\$54,115	3a	\$135,895	\$42,267	\$75,146	4a	\$147,483	\$62,288	\$90.19
04341	200	001	\$19,396	3a	\$135,895	\$7,548	\$23,981	4a	\$147,483	\$11,123	\$24.24
04341		002	\$19,999	3a	\$135,895	\$8,152	\$24,871	4a	\$147,483	\$12,013	\$25.00
04341		55-574412	\$23,019	3a	\$135,895	\$11,171	\$29,320	4a	\$147,483	\$16,462	\$28.77
04342	200	001	\$26,925	1b	\$165,947	\$12,457	\$28,727	2b	\$127,807	\$17,584	\$33.66
04343	100	001	\$19,396	3a	\$135,895	\$7,548	\$23,981	4a	\$147,483	\$11,123	\$48.49
04346	350	001	\$26,063	1a	\$161,614	\$11,973	\$27,889	2a	\$125,659	\$16,933	\$18.62
05002	2170	001	\$114,997	3a	\$500,167	\$71,390	\$140,818	4a*	\$446,949	\$101,852	\$13.25
05306	730	001	\$60,685	1a	\$318,638	\$32,905	\$66,220	2a	\$235,315	\$45,704	\$20.78
06004	500	001	\$37,370	3a	\$195,559	\$20,320	\$46,434	4a*	\$196,532	\$29,299	\$18.68
06006	400	001	\$38,842	3a	\$182,300	\$22,949	\$49,346	4a*	\$185,632	\$33,161	\$24.28
07008	900	001	\$23,985	1a	\$156,984	\$10,299	\$25,268	2a	\$122,425	\$14,595	\$6.66
07008		002	\$23,193	1a	\$156,984	\$9,507	\$24,146	2a	\$122,425	\$13,472	\$6.44
07008		55-627600	\$24,778	1a	\$156,984	\$11,091	\$26,391	2a	\$122,425	\$15,717	\$6.88
07015	2400	001	\$74,466	3a	\$214,036	\$55,805	\$98,744	4a	\$211,722	\$80,285	\$7.76
07015		002	\$56,052	3a	\$236,183	\$35,460	\$70,966	4a	\$229,929	\$50,920	\$5.84
07015		004	\$76,568	1a	\$228,810	\$56,619	\$94,086	2a	\$172,585	\$79,039	\$7.98
07015		005	\$108,129	1a	\$289,214	\$82,914	\$134,020	2a	\$214,767	\$115,296	\$11.26
07019	1125	00	\$20,756	1a	\$150,039	\$7,675	\$21,167	2a	\$117,576	\$10,916	\$4.61
07019		001	\$72,870	3b	\$305,687	\$46,219	\$90,783	4b	\$282,370	\$66,165	\$16.19
07019		002	\$20,775	3b	\$145,606	\$8,081	\$24,994	4b	\$151,515	\$11,784	\$4.62
07019		003	\$20.994	1b	\$144,749	\$8,374	\$21,801	2b	\$113,170	\$11,935	\$4.67
07019		004	\$16,654	1b	\$126,121	\$5,658	\$16,965	2b	\$100,308	\$8,220	\$3.70
07026	3740	001	\$48,020	3a	\$235,229	\$27,511	\$59,486	4a	\$229,145	\$39,508	\$3.21
07026	00	002	\$111.535	3b	\$505.034	\$67,504	\$135,184	4b	\$445,321	\$96,359	\$7.46
07037	37	001	\$17,415	3a	\$136,139	\$5,546	\$21,046	4a	\$147,683	\$8,171	\$117.67
07051	4800	001	\$58,199	1a	\$277,361	\$34,018	\$65,332	2a	\$206,490	\$47,330	\$3.03
07052	270	00	\$18,060	1a	\$137,539	\$6,068	\$18,206	2a	\$108,846	\$8,716	\$16.72
07052	2,0	001	\$26,092	3a	\$141,199	\$13,782	\$33,460	4a	\$151,843	\$20,221	\$24.16
07052		001	\$22,991	3a	\$141,199	\$10,681	\$28,910	4a	\$151,843	\$15,671	\$21.29
07052		002	\$26,092	3a	\$141,199	\$13,782	\$33,460	4a	\$151,843	\$20,221	\$24.16
07002		003	φ20,032	Ja	φ1 4 1,133	φ13,702	φυυ, 4 00	4 a	काउा,७43	φ ∠ υ, ∠∠ ι	φ24.10

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID A	Ava Pon	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
					•	•			·		
07055		55-609892	\$22,356	3a	\$155,783	\$8,774	\$27,056	4a	\$163,833	\$12,772	\$27.94
07055		55-609893	\$20,208	1a	\$147,725	\$7,329	\$20,549	2a	\$115,959	\$10,439	\$25.26
07070	3600	001	\$121,372	3b	\$387,359	\$87,601	\$155,637	4b	\$349,130	\$125,199	\$8.43
07071	8	001	\$20,838	3a	\$142,440	\$8,420	\$25,670	4a	\$152,863	\$12,343	QNI
07072	95	001	\$17,654	3a	\$135,564	\$5,835	\$21,436	4a	\$147,210	\$8,602	\$46.46
07073	150	001	\$21,525	1a	\$143,095	\$9,049	\$22,760	2a	\$112,726	\$12,932	\$35.87
07076	225	001	\$22,850	1a	\$150,039	\$9,769	\$24,144	2a	\$117,576	\$13,894	\$25.39
07078	2883	001	\$59,293	3a	\$256,681	\$36,915	\$74,456	4a	\$246,780	\$52,941	\$5.14
07078		002	\$45,291	3a	\$256,681	\$22,913	\$54,375	4a	\$246,780	\$32,860	\$3.93
07078		003	\$68,203	3a	\$256,681	\$45,825	\$87,235	4a	\$246,780	\$65,719	\$5.91
07079	2900	001	\$47,620	1a	\$263,472	\$24,650	\$51,478	2a	\$196,790	\$34,322	\$4.11
07079		002	\$52,102	1a	\$263,472	\$29,131	\$57,719	2a	\$196,790	\$40,562	\$4.49
07084		55-618446	\$16,634	2a	\$117,317	\$6,405	\$17,551	1a	\$149,669	\$4,503	\$18.82
07086	225	001	\$38,293	3a	\$159,098	\$24,422	\$50,027	4a	\$166,558	\$35,506	\$42.55
07089	3643	00	\$74,681	3a	\$290,269	\$49,374	\$94,626	4a	\$274,393	\$70,703	\$5.12
07089		001	\$146,317	3b	\$366,096	\$114,400	\$192,477	4b	\$331,749	\$163,554	\$10.04
07089		002	\$59,557	3a	\$310,834	\$32,457	\$71,843	4a	\$291,300	\$46,446	\$4.09
07094		002	\$59,363	1a	\$301,414	\$33,084	\$65,449	2a	\$223,286	\$45,982	\$4.07
07094		003	\$56,606	1a	\$301,414	\$30,327	\$61,617	2a	\$223,286	\$42,150	\$3.88
07094		007	\$62,120	1a	\$301,414	\$35,841	\$69,281	2a	\$223,286	\$49,814	\$4.26
07094	7439	018	\$117,540	3a	\$375,842	\$84,773	\$151,185	4a	\$344,743	\$121,129	\$3.95
07101	4438	004	\$51,680	1a	\$266,188	\$28,473	\$56,961	2a	\$198,687	\$39,639	\$2.91
07101		007	\$22,678	3b	\$143,431	\$10,173	\$27,906	4b	\$149,737	\$14,852	\$1.28
07101		800	\$22,678	3b	\$143,431	\$10,173	\$27,906	4b	\$149,737	\$14,852	\$1.28
07104	1300	55-618436	\$46,085	3a	\$215,447	\$27,302	\$57,832	4a	\$212,882	\$39,272	\$8.86
07111	150	001	\$17,456	2a	\$107,876	\$8,050	\$17,467	1a	\$136,150	\$5,597	\$29.09
07114	149	001	\$18,827	3b	\$138,478	\$6,754	\$18,827	3b	\$138,478	\$6,754	\$31.59
07121	2800	001	\$419,886	1a	\$1,741,027	\$268,097	\$477,147	2a	\$1,228,629	\$370,030	\$37.49
07128	3054	001	\$94,951	1a	\$409,736	\$59,229	\$108,154	2a	\$298,933	\$82,092	\$7.77
07129	275	001	\$20,710	3b	\$146,210	\$7,963	\$24,861	4b	\$152,009	\$11,608	\$18.83
07153	960	001	\$28,386	1a	\$173,652	\$13,247	\$30,347	2a	\$134,065	\$18,659	\$7.39
07154	730	001	\$70,453	1b	\$313,690	\$43,105	\$79,953	2b	\$229,820	\$59,916	\$24.13
07169	160	001	\$20,664	3a	\$150,480	\$7,545	\$24,913	4a	\$159,473	\$11,009	\$32.29
07189	1000	001	\$16,222	1b	\$125,307	\$5,297	\$16,402	2b	\$99,746	\$7,706	\$4.06
07215	75	001	\$17,976	1a	\$136,150	\$6,106	\$18,187	2a	\$107,876	\$8,782	\$59.92
07215		55-606783	\$17,456	2a	\$107,876	\$8,050	\$17,467	1a	\$136,150	\$5,597	\$58.19
07271	50	001	\$17,873	1a	\$133,835	\$6,205	\$18,214	2a	\$106,259	\$8,950	\$89.37
07274	56	001	\$56,005	3a	\$136,691	\$44,088	\$77,838	4a	\$148,137	\$64,923	\$250.02
07298	45	001	\$17,722	3a	\$135,232	\$5,932	\$21,557	4a	\$146,938	\$8,747	\$98.45
07305	9213	001	\$142,031	4a	\$476,767	\$100,465	\$142,031	4a	\$476,767	\$100,465	\$3.85

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table E3-1	ız: Summa	ary of Lowe	St Cost and S	second Lowes	t Cost for Imp	acted Small v	Nater Systems S	serving <10,0	00 Persons	1	
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Avg. Pop.	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
07305		002	\$96,016	1a	\$413,573	\$59,960	\$109,396	2a	\$301,612	\$83,100	\$2.61
07305		003	\$83,168	1a	\$413,573	\$47,111	\$91,588	2a	\$301,612	\$65,293	\$2.26
07307	1074	001	\$80,949	1b	\$338,528	\$51,435	\$92,973	2b	\$246,971	\$71,441	\$18.84
07335	50	001	\$18,792	3a	\$135,895	\$6,944	\$23,091	4a	\$147,483	\$10,233	\$93.96
07338	1800	001	\$40,989	1b	\$204,703	\$23,142	\$45,882	2b	\$154,567	\$32,406	\$5.69
07343	300	001	\$23,327	3b	\$145,606	\$10,633	\$28,715	4b	\$151,515	\$15,505	\$19.44
07354	800	001	\$28,267	1a	\$166,244	\$13,773	\$30,683	2a	\$128,892	\$19,445	\$8.83
07366	325	001	\$25,740	1b	\$156,526	\$12,093	\$27,705	2b	\$121,302	\$17,130	\$19.80
07371	161	001	\$23,904	3a	\$151,540	\$10,692	\$29,573	4a	\$160,345	\$15,594	\$37.12
07371		002	\$34,596	3a	\$151,540	\$21,384	\$45,167	4a	\$160,345	\$31,187	\$53.72
07392	75	001	\$18,708	3a	\$139,210	\$6,571	\$22,752	4a	\$150,208	\$9,656	\$62.36
07400	240	001	\$37,626	3a	\$161,087	\$23,582	\$48,925	4a	\$168,193	\$34,261	\$39.19
07400		002	\$30,690	3a	\$161,087	\$16,646	\$38,848	4a	\$168,193	\$24,184	\$31.97
07401	760	001	\$29,638	3b	\$148,626	\$16,681	\$37,716	4b	\$153,984	\$24,291	\$9.75
07409	2000	001	\$37,752	1a	\$221,803	\$18,414	\$40,344	2a	\$167,691	\$25,724	\$4.72
07411	375	001	\$191,214	4a*	\$560,587	\$142,339	\$191,214	4a*	\$560,587	\$142,339	\$127.48
07411		002	\$48,021	3a	\$178,986	\$32,416	\$62,819	4a	\$182,907	\$46,873	\$32.01
07412	2859	001	\$72,101	3a	\$318,797	\$44,307	\$89,356	4a	\$297,846	\$63,389	\$6.30
07431	50	001	\$19,094	3a	\$135,895	\$7,246	\$23,536	4a	\$147,483	\$10,678	\$95.47
07431		002	\$21,811	3a	\$135,895	\$9,963	\$27,540	4a	\$147,483	\$14,682	\$109.05
07441	1150	001	\$59,268	3a	\$205,503	\$41,352	\$77,394	4a	\$204,707	\$59,546	\$12.88
07448	25	001	\$16,816	1a	\$131,520	\$5,350	\$16,863	2a	\$104,643	\$7,740	\$168.16
07484	100	001	\$21,049	1b	\$144,964	\$8,410	\$21,864	2b	\$113,318	\$11,985	\$52.62
07487	350	001	\$15,895	1b	\$124,858	\$5,010	\$15,962	2b	\$99,436	\$7,293	\$11.35
07500	9600	002	\$99,333	1a	\$425,518	\$62,235	\$113,260	2a	\$309,954	\$86,237	\$2.59
07500		003	\$90,442	1a	\$425,518	\$53,344	\$100,940	2a	\$309,954	\$73,917	\$2.36
07507	50	001	\$17,584	3a	\$135,895	\$5,736	\$21,311	4a	\$147,483	\$8,453	\$87.92
07618	120	001	\$17,873	1a	\$135,739	\$6,038	\$18,070	2a	\$107,589	\$8,690	\$37.23
07624	1000	001	\$36,588	3a	\$195,559	\$19,539	\$45,307	4a	\$196,532	\$28,172	\$9.15
07626	25	001	\$25,873	3a	\$132,581	\$14,314	\$33,786	4a	\$144,758	\$21,165	\$258.73
07638	950	001	\$34,123	3a	\$192,244	\$17,363	\$41,944	4a	\$193,807	\$25,047	\$8.98
07660	100	001	\$33,028	3a	\$142,525	\$20,602	\$43,533	4a	\$152,933	\$30,200	\$82.57
07671	120	001	\$25,825	1b	\$160,038	\$11,873	\$27,581	2b	\$123,726	\$16,794	\$53.80
07675	50	001	\$23.320	3a	\$135.895	\$11,473	\$29,765	4a	\$147,483	\$16,907	\$116.60
07677	32	001	\$16,979	1a	\$132,168	\$5,456	\$17,049	2a	\$105,095	\$7,886	\$132.64
07682	610	001	\$163,421	3a	\$651,124	\$106,653	\$201,806	4a	\$571,051	\$152,020	\$66.98
07683	100	001	\$28,913	3b	\$140,169	\$16,693	\$37,235	4b	\$147,071	\$24,413	\$72.28
07685	75	001	\$20,679	3a	\$139,210	\$8,542	\$25,648	4a	\$150,208	\$12,553	\$68.93
07700	900	001	\$31,037	3a	\$188,930	\$14,565	\$37,682	4a	\$191,082	\$21,022	\$8.62
07706	186	001	\$16,325	1b	\$124,905	\$5,436	\$16,585	2b	\$99,468	\$7,912	\$21.94

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table Lo-	IZ. Gaiiiii	ary or Lowe	ot oost and c	Decona Lowes	st oost for fing	l detect official	Water Systems		00 1 6130113		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Avg. Pop.	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
07713	100	001	\$225,090	3a	\$829,319	\$152,787	\$280,204	4a	\$717,545	\$217,646	\$562.72
07727	40	001	\$36,194	1b	\$188,644	\$19,747	\$40,231	2b	\$143,479	\$27,722	QNI
07736	25	001	\$17,708	1a	\$131,520	\$6,241	\$18,153	2a	\$104,643	\$9,030	\$177.08
08006	150	001	\$19,073	1b	\$137,255	\$7,106	\$19,601	2b	\$107,996	\$10,186	\$31.79
08015	2012	358	\$49,316	3a	\$262,647	\$26,418	\$59,818	4a	\$251,685	\$37,875	\$6.13
08018	78	001	\$20,465	3a	\$139,608	\$8,294	\$25,308	4a	\$150,535	\$12,184	\$65.59
08023	320	001	\$29,711	3a	\$171,693	\$14,742	\$36,776	4a	\$176,912	\$21,352	\$23.21
08033	125	001	\$177,529	3d	\$944,339	\$95,197	\$187,833	1a	\$714,126	\$125,573	QNI
08035	737	001	\$31,654	4a	\$182,199	\$15,769	\$31,654	4a	\$182,199	\$15,769	\$10.74
08038	6000	001	\$30,638	1b	\$187,445	\$14,295	\$32,510	2b	\$142,651	\$20,073	\$1.28
08038		002	\$40,532	2b	\$144,070	\$27,972	\$40,532	2b	\$144,070	\$27,972	\$1.69
08046	285	001	\$23,403	3a	\$167,053	\$8,838	\$27,908	4a	\$173,098	\$12,817	\$20.53
08056	320	001	\$24,066	1a	\$158,836	\$10,218	\$25,254	2a	\$123,719	\$14,468	\$18.80
08061	50	001	\$21,207	3a	\$135,895	\$9,359	\$26,650	4a	\$147,483	\$13,792	\$106.04
08068	2683	001	\$288,548	3a	\$611,666	\$235,221	\$382,298	4a	\$538,613	\$335,339	\$26.89
08068		002	\$152,652	3a	\$472,928	\$111,420	\$196,015	4a	\$424,557	\$159,001	\$14.22
08077	1000	001	\$190,195	3a	\$184,952	\$174,070	\$267,786	4a	\$187,812	\$251,412	\$47.55
08078	200	001	\$68,453	1a	\$351,439	\$37,813	\$74,985	2a	\$258,222	\$52,472	\$85.57
08081	426	001	\$54,615	3a	\$278,186	\$30,362	\$66,555	4a	\$264,460	\$43,498	\$32.05
08081		002	\$36,140	3a	\$206,017	\$18,178	\$44,059	4a	\$205,130	\$26,175	\$21.21
08081		003	\$16,491	3a	\$129,266	\$5,221	\$20,135	4a	\$142,033	\$7,752	\$9.68
08081		004	\$16,686	3a	\$130,030	\$5,350	\$20,373	4a	\$142,661	\$7,935	\$9.79
08082	75	001	\$21,829	3a	\$139,210	\$9,692	\$27,338	4a	\$150,208	\$14,243	\$72.76
08129	100	001	\$81,672	3a	\$352,010	\$50,982	\$101,227	4a	\$325,150	\$72,880	\$204.18
08316	310	001	\$102,352	3a	\$437,989	\$64,166	\$126,112	4a	\$395,834	\$91,602	\$82.54
08316		002	\$24,137	3a	\$130,157	\$12,789	\$31,413	4a	\$142,765	\$18,966	\$19.46
08342	38	001	\$18,937	3a	\$134,304	\$7,228	\$23,412	4a	\$146,175	\$10,668	\$124.59
08342		002	\$26,165	3a	\$134,304	\$14,456	\$34,080	4a	\$146,175	\$21,336	\$172.14
08351	200	001	\$25,127	3a	\$155,783	\$11,545	\$31,090	4a	\$163,833	\$16,806	\$31.41
08703	304	001	\$29,100	3a	\$169,572	\$14,316	\$36,018	4a	\$175,169	\$20,746	\$23.93
08703		002	\$22,489	1a	\$157,355	\$8,770	\$23,122	2a	\$122,684	\$12,426	\$18.49
09004	7765	001	\$21,898	1a	\$154,860	\$8,397	\$22,455	2a	\$120,942	\$11,911	\$0.71
09011	1300	001	\$25,475	1a	\$166,096	\$10,994	\$26,751	2a	\$128,788	\$15,523	\$4.90
09011		002	\$45,732	3a	\$234,910	\$25,252	\$56,219	4a	\$228,883	\$36,264	\$8.79
09021	2200	001	\$45,503	3a	\$226,496	\$25,756	\$56,364	4a	\$221,965	\$37,013	\$5.17
09021		005	\$71,259	3a	\$226,496	\$51,513	\$93,377	4a	\$221,965	\$74,025	\$8.10
09021		800	\$71,259	3a	\$226,496	\$51,513	\$93,377	4a	\$221,965	\$74,025	\$8.10
09025	315	00	\$27,183	3a	\$171,031	\$12,272	\$33,153	4a	\$176,367	\$17,777	\$21.57
09025		001	\$25,430	3a	\$171,031	\$10,519	\$30,614	4a	\$176,367	\$15,237	\$20.18
09025		55-629078	\$27,183	3a	\$171,031	\$12,272	\$33,153	4a	\$176,367	\$17,777	\$21.57
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^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

pp. POE ID 001 007 001 001 001 000 001 55-629079 001 001 002 003 004 005 006	Lowest Annualized Cost \$49,249 \$102,272 \$27,992 \$16,072 \$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160 \$66,217	Technology with Lowest Annualized Cost 1a 3c 3a 3a 2a 1a 1a 3a 5a 1a 1a	Capital Cost for Lowest Cost Option \$252,669 \$485,798 \$165,727 \$133,084 \$107,876 \$151,428 \$161,087 \$1,537,819 \$209,209	Annual O&M Costs for Lowest Cost Option \$27,221 \$59,918 \$13,543 \$4,469 \$8,050 \$8,600 \$9,316 \$8,071 \$155,736	Second Lowest Annualized Cost \$54,427 \$114,328 \$34,644 \$19,261 \$17,467 \$22,557 \$23,575 \$26,389	Technology with Second Lowest Annualized Cost 2a 3b 4a 4a* 1a 2a 2a 4a	Capital Cost for Second Lowest Cost Option \$189,246 \$572,087 \$172,008 \$145,172 \$136,150 \$118,546 \$118,546 \$168,193	Annual O&M Costs for Second Lowest Cost Option \$37,928 \$64,451 \$19,647 \$6,605 \$5,597 \$12,221 \$13,240 \$11,726	Estimated Monthly Cost Increase \$3.08 \$6.39 \$25.45 \$4.23 \$58.19 \$22.71 \$23.46
001 007 001 001 001 00 001 55-629079 001 001 002 003 004 005	Annualized Cost \$49,249 \$102,272 \$27,992 \$16,072 \$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	with Lowest Annualized Cost 1a 3c 3a 3a 2a 1a 1a 3a 5a 1a 1a	for Lowest Cost Option \$252,669 \$485,798 \$165,727 \$133,084 \$107,876 \$151,428 \$151,428 \$161,087 \$1,537,819	Costs for Lowest Cost Option \$27,221 \$59,918 \$13,543 \$4,469 \$8,050 \$8,600 \$9,316 \$8,071	Annualized Cost \$54,427 \$114,328 \$34,644 \$19,261 \$17,467 \$22,557 \$23,575 \$26,389	with Second Lowest Annualized Cost 2a 3b 4a 4a* 1a 2a 2a	Second Lowest Cost Option \$189,246 \$572,087 \$172,008 \$145,172 \$136,150 \$118,546 \$118,546	Costs for Second Lowest Cost Option \$37,928 \$64,451 \$19,647 \$6,605 \$5,597 \$12,221 \$13,240	Monthly Cost Increase \$3.08 \$6.39 \$25.45 \$4.23 \$58.19 \$22.71 \$23.46
001 007 001 001 001 00 001 55-629079 001 001 002 003 004 005	Annualized Cost \$49,249 \$102,272 \$27,992 \$16,072 \$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	with Lowest Annualized Cost 1a 3c 3a 3a 2a 1a 1a 3a 5a 1a 1a	for Lowest Cost Option \$252,669 \$485,798 \$165,727 \$133,084 \$107,876 \$151,428 \$151,428 \$161,087 \$1,537,819	Lowest Cost Option \$27,221 \$59,918 \$13,543 \$4,469 \$8,050 \$8,600 \$9,316 \$8,071	Annualized Cost \$54,427 \$114,328 \$34,644 \$19,261 \$17,467 \$22,557 \$23,575 \$26,389	Lowest Annualized Cost 2a 3b 4a 4a* 1a 2a 2a	Second Lowest Cost Option \$189,246 \$572,087 \$172,008 \$145,172 \$136,150 \$118,546 \$118,546	\$econd Lowest Cost Option \$37,928 \$64,451 \$19,647 \$6,605 \$5,597 \$12,221 \$13,240	Monthly Cost Increase \$3.08 \$6.39 \$25.45 \$4.23 \$58.19 \$22.71 \$23.46
001 007 001 001 001 00 001 55-629079 001 001 002 003 004 005	Cost \$49,249 \$102,272 \$27,992 \$16,072 \$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	Cost 1a 3c 3a 3a 2a 1a 1a 5a 1a 1a	for Lowest Cost Option \$252,669 \$485,798 \$165,727 \$133,084 \$107,876 \$151,428 \$151,428 \$161,087 \$1,537,819	Option \$27,221 \$59,918 \$13,543 \$4,469 \$8,050 \$8,600 \$9,316 \$8,071	Cost \$54,427 \$114,328 \$34,644 \$19,261 \$17,467 \$22,557 \$23,575 \$26,389	Cost 2a 3b 4a 4a* 1a 2a 2a	Cost Option \$189,246 \$572,087 \$172,008 \$145,172 \$136,150 \$118,546 \$118,546	Cost Option \$37,928 \$64,451 \$19,647 \$6,605 \$5,597 \$12,221 \$13,240	Monthly Cost Increase \$3.08 \$6.39 \$25.45 \$4.23 \$58.19 \$22.71 \$23.46
001 007 001 001 001 00 001 55-629079 001 001 002 003 004 005	\$49,249 \$102,272 \$27,992 \$16,072 \$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	1a 3c 3a 2a 1a 1a 5a 1a 1a 1a 1a 1a 1a 1a 1a	\$252,669 \$485,798 \$165,727 \$133,084 \$107,876 \$151,428 \$151,428 \$161,087 \$1,537,819	\$27,221 \$59,918 \$13,543 \$4,469 \$8,050 \$8,600 \$9,316 \$8,071	Cost \$54,427 \$114,328 \$34,644 \$19,261 \$17,467 \$22,557 \$23,575 \$26,389	Cost 2a 3b 4a 4a* 1a 2a 2a	Cost Option \$189,246 \$572,087 \$172,008 \$145,172 \$136,150 \$118,546 \$118,546	Cost Option \$37,928 \$64,451 \$19,647 \$6,605 \$5,597 \$12,221 \$13,240	\$3.08 \$6.39 \$25.45 \$4.23 \$58.19 \$22.71 \$23.46
007 001 001 001 00 001 55-629079 001 001 002 003 004 005	\$102,272 \$27,992 \$16,072 \$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	3c 3a 3a 2a 1a 1a 3a 5a 1a	\$485,798 \$165,727 \$133,084 \$107,876 \$151,428 \$151,428 \$161,087 \$1,537,819	\$59,918 \$13,543 \$4,469 \$8,050 \$8,600 \$9,316 \$8,071	\$114,328 \$34,644 \$19,261 \$17,467 \$22,557 \$23,575 \$26,389	3b 4a 4a* 1a 2a 2a	\$572,087 \$172,008 \$145,172 \$136,150 \$118,546 \$118,546	\$64,451 \$19,647 \$6,605 \$5,597 \$12,221 \$13,240	\$6.39 \$25.45 \$4.23 \$58.19 \$22.71 \$23.46
001 001 001 00 001 55-629079 001 001 002 003 004 005	\$27,992 \$16,072 \$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	3a 3a 2a 1a 1a 3a 5a 1a	\$165,727 \$133,084 \$107,876 \$151,428 \$151,428 \$161,087 \$1,537,819	\$13,543 \$4,469 \$8,050 \$8,600 \$9,316 \$8,071	\$34,644 \$19,261 \$17,467 \$22,557 \$23,575 \$26,389	4a 4a* 1a 2a 2a	\$172,008 \$145,172 \$136,150 \$118,546 \$118,546	\$19,647 \$6,605 \$5,597 \$12,221 \$13,240	\$25.45 \$4.23 \$58.19 \$22.71 \$23.46
001 001 00 001 55-629079 001 001 002 003 004 005	\$16,072 \$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	3a 2a 1a 1a 3a 5a 1a	\$133,084 \$107,876 \$151,428 \$151,428 \$161,087 \$1,537,819	\$4,469 \$8,050 \$8,600 \$9,316 \$8,071	\$19,261 \$17,467 \$22,557 \$23,575 \$26,389	4a* 1a 2a 2a	\$145,172 \$136,150 \$118,546 \$118,546	\$6,605 \$5,597 \$12,221 \$13,240	\$4.23 \$58.19 \$22.71 \$23.46
001 00 001 55-629079 001 001 002 003 004 005	\$17,456 \$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	2a 1a 1a 3a 5a 1a	\$107,876 \$151,428 \$151,428 \$161,087 \$1,537,819	\$8,050 \$8,600 \$9,316 \$8,071	\$17,467 \$22,557 \$23,575 \$26,389	1a 2a 2a	\$136,150 \$118,546 \$118,546	\$5,597 \$12,221 \$13,240	\$58.19 \$22.71 \$23.46
00 001 55-629079 001 001 002 003 004 005	\$21,802 \$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	1a 1a 3a 5a 1a	\$151,428 \$151,428 \$161,087 \$1,537,819	\$8,600 \$9,316 \$8,071	\$22,557 \$23,575 \$26,389	2a 2a	\$118,546 \$118,546	\$12,221 \$13,240	\$22.71 \$23.46
001 55-629079 001 001 002 003 004 005	\$22,519 \$22,115 \$289,809 \$40,780 \$44,405 \$42,160	1a 3a 5a 1a 1a	\$151,428 \$161,087 \$1,537,819	\$9,316 \$8,071	\$23,575 \$26,389	2a	\$118,546	\$13,240	\$23.46
55-629079 001 001 002 003 004 005 006	\$22,115 \$289,809 \$40,780 \$44,405 \$42,160	3a 5a 1a 1a	\$161,087 \$1,537,819	\$8,071	\$26,389				
001 001 002 003 004 005	\$289,809 \$40,780 \$44,405 \$42,160	5a 1a 1a	\$1,537,819			4a	\$168.193	£44.70G	
001 002 003 004 005	\$40,780 \$44,405 \$42,160	1a 1a		\$155,736			T 7,	\$11,720	\$23.04
002 003 004 005 006	\$44,405 \$42,160	1a	\$209.209		\$590,972	3a	\$1,872,016	\$427,763	\$25.99
003 004 005 006	\$42,160			\$22,540	\$45,388	2a	\$158,896	\$31,535	\$1.44
004 005 006			\$221,655	\$25,080	\$49,647	2a	\$167,587	\$35,036	\$1.56
004 005 006		3a	\$233,788	\$21,778	\$51,152	4a	\$227,960	\$31,277	\$1.49
006	φυυ,∠ ι /	1b	\$309,408	\$39,241	\$74,333	2b	\$226,864	\$54,554	\$2.33
	\$58,247	3a	\$312,553	\$30,997	\$69,875	4a	\$292,712	\$44,355	\$2.05
	\$62,009	3a	\$294,733	\$36,313	\$76,234	4a	\$278,063	\$51,991	\$2.18
007	\$16,242	3a	\$129,266	\$4,972	\$19,766	4a	\$142,033	\$7,383	\$0.57
008	\$60,018	3a	\$320,189	\$32,102	\$71,994	4a	\$298,991	\$45,926	\$2.11
55-626904	\$38,739	1a	\$202,203	\$21,111	\$42,990	2a	\$154,003	\$29,563	\$1.37
002		3a				4a			\$6.67
									\$5.64
									\$149.22
									\$35.83
									\$29.33
									\$2.14
									\$3.19
									\$3.83
									\$5.28
									\$27.71
								. ,	\$17.09
			. ,						\$54.78
									\$103.72
									\$96.26
									\$8.15
					. ,				\$7.75
001	\$20,016	1a	\$143,095						\$33.36
001	\$24,778	_		\$11,091		2a			\$20.65
001			\$1,130,675		\$238,088	3a		\$136,794	\$6.96
002	\$291.995		. , ,	\$168.923		4a			\$8.98
	, , ,			,					\$64.55
		3a				4a			\$12.40
)	0 002 003 001 001 001 001 003 0 006 007 001 002 001 001 001 001 001 001	0 002 \$125,304 003 \$106,119 001 \$74,012 001 \$132,556 001 \$35,199 0 001 \$29,978 0 003 \$44,669 0 006 \$27,551 007 \$38,043 001 \$93,097 002 \$27,349 001 \$105,184 001 \$56,006 001 \$17,327 001 \$17,013 002 \$16,191 001 \$20,016 001 \$226,331 002 \$291,995 230 \$20,915	0 002 \$125,304 3a 003 \$106,119 3a 001 \$74,012 3a 001 \$132,556 3a 001 \$35,199 3a 0 001 \$29,978 1a 0 006 \$27,551 3a 007 \$38,043 1a 001 \$93,097 1b 002 \$27,349 1a 001 \$105,184 3a 001 \$105,184 3a 001 \$17,031 1b 001 \$17,013 1b 002 \$16,191 1b 001 \$20,016 1a 001 \$24,778 1a 001 \$226,331 3d 002 \$291,995 3a 230 \$20,915 3a	0 002 \$125,304 3a \$336,984 003 \$106,119 3a \$336,984 001 \$74,012 3a \$275,895 001 \$132,556 3a \$434,744 001 \$35,199 3a \$169,042 0 001 \$29,978 1a \$175,714 003 \$44,669 1a \$242,740 0 006 \$27,551 3a \$180,179 007 \$38,043 1a \$204,765 001 \$93,097 1b \$379,211 002 \$27,349 1a \$166,244 001 \$105,184 3a \$180,179 001 \$56,006 3a \$147,165 001 \$17,327 1b \$129,504 001 \$17,013 1b \$124,408 002 \$16,191 1b \$124,408 001 \$20,016 1a \$143,095 001 \$226,331 3d \$1,1130,	0 002 \$125,304 3a \$336,984 \$95,924 003 \$106,119 3a \$336,984 \$76,739 001 \$74,012 3a \$275,895 \$49,958 001 \$132,556 3a \$434,744 \$94,653 001 \$35,199 3a \$169,042 \$20,462 0 001 \$29,978 1a \$175,714 \$14,658 003 \$44,669 1a \$242,740 \$23,506 0 006 \$27,551 3a \$180,179 \$11,842 007 \$38,043 1a \$204,765 \$20,191 001 \$93,097 1b \$379,211 \$60,036 002 \$27,349 1a \$166,244 \$12,855 001 \$105,184 3a \$180,179 \$89,476 001 \$56,006 3a \$147,165 \$43,176 001 \$17,327 1b \$124,408 \$6,167 002 \$16,191 1b	0 002 \$125,304 3a \$336,984 \$95,924 \$164,442 003 \$106,119 3a \$336,984 \$76,739 \$137,008 001 \$74,012 3a \$275,895 \$49,958 \$94,473 001 \$132,556 3a \$434,744 \$94,653 \$169,408 001 \$35,199 3a \$169,042 \$20,462 \$44,890 0 001 \$29,978 1a \$175,714 \$14,658 \$32,450 0 003 \$44,669 1a \$242,740 \$23,506 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\$169,408 4a \$393,165 001 \$35,199 3a \$169,042 \$20,462 \$44,890 4a \$174,733 001 \$29,978 1a \$175,714 \$14,658 \$32,450 2a \$135,505 003 \$44,669 1a \$242,740 \$23,506 \$48,670 2a \$182,312 006 \$27,551 3a \$180,179 \$11,842 \$33,152 4a \$183,888 007 \$38,043 1a \$204,765 \$20,191 \$41,848 2a \$155,793 001 \$93,097 1b \$379,211 \$60,036 \$107,289</td> <td> 002 \$125,304 3a \$336,984 \$95,924 \$164,442 4a \$312,797 \$137,171 003 \$106,119 3a \$336,984 \$76,739 \$137,008 4a \$312,797 \$109,737 001 \$74,012 3a \$275,895 \$49,958 \$94,473 4a \$262,577 \$71,581 001 \$132,556 3a \$434,744 \$94,653 \$169,408 4a \$333,165 \$135,130 001 \$35,199 3a \$169,042 \$20,462 \$44,890 4a \$174,733 \$29,656 001 \$29,978 1a \$175,714 \$14,658 \$32,450 2a \$135,505 \$20,636 003 \$44,669 1a \$242,740 \$23,506 \$48,670 2a \$182,312 \$32,775 006 \$27,551 3a \$180,179 \$11,842 \$33,152 4a \$183,888 \$17,120 007 \$38,043 1a \$204,765 \$20,191 \$41,848 2a \$155,793 \$228,265 001 \$93,097 1b \$3379,211 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\$20,191 \$41,848 2a 001 \$93,097 1b \$379,211 \$60,036 \$107,289 2b 002 \$27,349 1a \$166,244 \$12,855 \$29,386 2a	0 002 \$125,304 3a \$336,984 \$95,924 \$164,442 4a \$312,797 003 \$106,119 3a \$336,984 \$76,739 \$137,008 4a \$312,797 001 \$74,012 3a \$275,895 \$49,958 \$94,473 4a \$262,577 001 \$132,556 3a \$434,744 \$94,653 \$169,408 4a \$393,165 001 \$35,199 3a \$169,042 \$20,462 \$44,890 4a \$174,733 001 \$29,978 1a \$175,714 \$14,658 \$32,450 2a \$135,505 003 \$44,669 1a \$242,740 \$23,506 \$48,670 2a \$182,312 006 \$27,551 3a \$180,179 \$11,842 \$33,152 4a \$183,888 007 \$38,043 1a \$204,765 \$20,191 \$41,848 2a \$155,793 001 \$93,097 1b \$379,211 \$60,036 \$107,289	002 \$125,304 3a \$336,984 \$95,924 \$164,442 4a \$312,797 \$137,171 003 \$106,119 3a \$336,984 \$76,739 \$137,008 4a \$312,797 \$109,737 001 \$74,012 3a \$275,895 \$49,958 \$94,473 4a \$262,577 \$71,581 001 \$132,556 3a \$434,744 \$94,653 \$169,408 4a \$333,165 \$135,130 001 \$35,199 3a \$169,042 \$20,462 \$44,890 4a \$174,733 \$29,656 001 \$29,978 1a \$175,714 \$14,658 \$32,450 2a \$135,505 \$20,636 003 \$44,669 1a \$242,740 \$23,506 \$48,670 2a \$182,312 \$32,775 006 \$27,551 3a \$180,179 \$11,842 \$33,152 4a \$183,888 \$17,120 007 \$38,043 1a \$204,765 \$20,191 \$41,848 2a \$155,793 \$228,265 001 \$93,097 1b \$3379,211 \$60,036 \$107,289 2b \$275,061 \$83,308 002 \$27,349 1a \$166,244 \$12,855 \$29,386 2a \$128,892 \$18,149 001 \$105,184 3a \$180,179 \$89,476 \$145,380 4a \$183,888 \$129,348 001 \$56,006 3a \$147,165 \$43,176 \$76,776 4a \$156,748 \$63,110 001 \$17,327 1b \$129,504 \$6,037 \$17,675 2b \$102,644 \$8,726 001 \$20,016 1a \$143,095 \$7,541 \$20,605 2a \$112,726 \$10,777 001 \$22,016 1a \$143,095 \$7,541 \$20,605 2a \$112,726 \$10,777 001 \$22,015 3a \$141,1035 \$168,923 \$344,729 4a \$1,196,266 \$240,433 230 \$20,915 3a \$140,005 \$8,709 \$25,942 4a \$150,862 \$12,789

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table Lo-	z. Gaiiiii	ary or Lowe	ot oost and c	Decona Lowes	st oost for min		Water Systems		00 1 6130113		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Avg. Pop.	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
10171		226	\$42,281	3a	\$167,252	\$27,699	\$55,272	4a	\$173,261	\$40,166	\$18.45
10188	45	001	\$36,857	3b	\$155,271	\$23,320	\$47,773	4b	\$159,415	\$33,875	\$204.76
10206	380	001	\$26,834	1a	\$164,392	\$12,502	\$28,787	2a	\$127,599	\$17,663	\$17.65
10207	300	001	\$24,778	1a	\$156,984	\$11,091	\$26,391	2a	\$122,425	\$15,717	\$20.65
10208	80	001	\$24,385	2b	\$136,826	\$12,456	\$24,462	1b	\$179,009	\$8,855	\$76.20
10208		002	\$18,429	2b	\$116,866	\$8,240	\$18,886	1b	\$150,102	\$5,799	\$57.59
10217	29	001	\$16,078	3a	\$133,111	\$4,472	\$19,268	4a	\$145,194	\$6,609	\$138.60
10218	78	001	\$30,418	3a	\$139,608	\$18,246	\$39,928	4a	\$150,535	\$26,804	\$97.49
10260	36	001	\$17,071	1a	\$132,539	\$5,516	\$17,155	2a	\$105,354	\$7,969	\$118.55
11005	164	001	\$20,660	1a	\$144,391	\$8,072	\$21,431	2a	\$113,631	\$11,524	\$31.49
11012	689	002	\$23,105	1a	\$153,651	\$9,709	\$24,252	2a	\$120,098	\$13,782	\$8.38
11014	8999	003	\$41,437	1a	\$216,988	\$22,519	\$45,802	2a	\$164,328	\$31,475	\$1.15
11017	5500	001	\$76,516	3a	\$372,340	\$44,054	\$92,756	4a	\$341,863	\$62,951	\$3.48
11017		002	\$120,571	3a	\$372,340	\$88,108	\$155,707	4a	\$341,863	\$125,902	\$5.48
11018	2110	001	\$46,808	3a	\$269,144	\$23,343	\$55,864	4a	\$257,026	\$33,456	\$5.55
11018		002	\$46,808	3a	\$269,144	\$23,343	\$55,864	4a	\$257,026	\$33,456	\$5.55
11019	4370	001	\$18,168	3a	\$131,633	\$6,691	\$22,458	4a	\$143,979	\$9,905	\$1.04
11019		002	\$23,962	3a	\$129,801	\$12,646	\$31,184	4a	\$142,472	\$18,762	\$1.37
11021	3603	001	\$137,663	3d	\$809,465	\$67,090	\$154,449	1a	\$651,100	\$97,684	\$9.55
11024	630	001	\$22,730	1a	\$158,373	\$8,922	\$23,394	2a	\$123,395	\$12,636	\$9.02
11024		002	\$27,767	3a	\$171,031	\$12,856	\$34,000	4a	\$176,367	\$18,623	\$11.02
11030	7250	001	\$104,168	3a	\$449,682	\$64,963	\$128,075	4a	\$405,446	\$92,727	\$3.59
11030		002	\$75,736	1a	\$352,983	\$44,961	\$84,996	2a	\$259,299	\$62,389	\$2.61
11030		004	\$68,819	1a	\$352,983	\$38,044	\$75,398	2a	\$259,299	\$52,791	\$2.37
11031	2500	002	\$63,318	3a	\$352,010	\$32,628	\$74,991	4a	\$325,150	\$46,643	\$6.33
11032	375	001	\$67,470	3a	\$178,986	\$51,865	\$90,943	4a	\$182,907	\$74,996	\$44.98
11036	990	002	\$26,677	1a	\$175,041	\$11,417	\$27,848	2a	\$135,035	\$16,075	\$6.74
11039	7800	001	\$352,524	3a	\$749,767	\$287,156	\$466,006	4a	\$652,146	\$409,150	\$11.30
11042	400	001	\$26,430	1a	\$166,244	\$11,937	\$28,090	2a	\$128,892	\$16,853	\$16.52
11042		002	\$25,512	1a	\$166,244	\$11,018	\$26,794	2a	\$128,892	\$15,556	\$15.95
11056	3000	001	\$65,557	3a	\$328,145	\$36,948	\$79,485	4a	\$305,531	\$52,848	\$5.46
11085	140	001	\$25,533	3b	\$162,520	\$11,364	\$30,886	4b	\$165,341	\$16,471	\$45.59
11085		002	\$22,517	3b	\$128,692	\$11,297	\$28,678	4b	\$137,689	\$16,674	\$40.21
11087	660	001	\$22,452	3b	\$138,961	\$10,337	\$27,865	4b	\$146,083	\$15,129	\$8.50
11089	50	001	\$22,717	3a	\$135,895	\$10,869	\$28,875	4a	\$147,483	\$16,017	\$113.58
11089		003	\$22,717	3a	\$135,895	\$10,869	\$28,875	4a	\$147,483	\$16,017	\$113.58
11097	292	001	\$27,522	3a	\$167,981	\$12,877	\$33,826	4a	\$173,861	\$18,668	\$23.56
11097		002	\$24,572	1a	\$156,244	\$10,950	\$26,151	2a	\$121,908	\$15,523	\$21.04
11100	1070	001	\$56,813	3b	\$313,420	\$29,488	\$67,374	4b	\$288,690	\$42,204	\$13.27
11105	95	001	\$17,966	3a	\$141,862	\$5,598	\$21,496	4a	\$152,388	\$8,210	\$47.28
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^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table Lo-	IZ. Julilli	ary or Lowe	si cosi ana c	second Lowes	or coar for finit	Jacted Siliali	vater bysterns t	Jerving -10,0	00 1 6130113		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Avg. Pop.	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
11204	130	001	\$20,903	3a	\$146,502	\$8,131	\$25,508	4a	\$156,203	\$11,889	\$40.20
11347	3500	001	\$54,598	3a	\$283,949	\$29,843	\$66,214	4a	\$269,198	\$42,744	\$3.90
11396	60	001	\$15,759	2b	\$100,456	\$7,001	\$15,835	1b	\$126,335	\$4,821	\$65.66
11405	250	001	\$27,037	3a	\$162,412	\$12,877	\$33,459	4a	\$169,283	\$18,700	\$27.04
11557	95	001	\$18,316	3a	\$141,862	\$5,948	\$22,009	4a	\$152,388	\$8,723	\$48.20
11706	248	001	\$22,170	3a	\$161,341	\$8,104	\$26,454	4a	\$168,402	\$11,772	\$22.35
11712	57	001	\$17,558	1a	\$134,483	\$5,833	\$17,711	2a	\$106,712	\$8,407	\$77.01
12001	1550	002	\$22,239	3a	\$139,958	\$10,037	\$27,890	4a	\$150,823	\$14,740	\$3.59
12001		003	\$17,611	3a	\$131,557	\$6,142	\$21,640	4a	\$143,916	\$9,092	\$2.84
12001		004	\$162,883	3a	\$460,200	\$122,761	\$211,310	4a	\$414,093	\$175,207	\$26.27
12009	2400	001	\$27,419	1a	\$171,874	\$12,435	\$29,105	2a	\$132,824	\$17,525	\$2.86
12009		002	\$64,983	3a	\$294,097	\$39,343	\$80,527	4a	\$277,540	\$56,330	\$6.77
12009		003	\$32,156	3a	\$180,179	\$16,448	\$39,809	4a	\$183,888	\$23,777	\$3.35
12009		004	\$24,821	3a	\$154,722	\$11,332	\$30,710	4a	\$162,961	\$16,503	\$2.59
12009		006	\$86,256	3a	\$367,920	\$54,180	\$106,914	4a	\$338,230	\$77,426	\$8.99
12009		007	\$39,492	3a	\$205,635	\$21,564	\$48,908	4a	\$204,816	\$31,052	\$4.11
12013	120	001	\$195,013	3d	\$993,220	\$108,420	\$202,035	3a	\$994,786	\$115,306	QNI
12015	66	001	\$24,312	3a	\$171,269	\$9,381	\$28,981	4a	\$176,564	\$13,588	\$92.09
12022	350	001	\$24,353	1a	\$161,614	\$10,263	\$25,470	2a	\$125,659	\$14,514	\$17.39
12025	5	005	\$16,563	1a	\$129,668	\$5,258	\$16,639	2a	\$103,349	\$7,628	QNI
12025		006	\$17,676	3a	\$129,929	\$6,349	\$21,848	4a	\$142,578	\$9,418	QNI
13001	733	001	\$26,251	3a	\$152,177	\$12,984	\$32,956	4a	\$160,868	\$18,930	\$8.95
13001		002	\$101,774	3a	\$530,205	\$55,549	\$120,352	4a	\$471,644	\$79,232	\$34.71
13001		55-561786	\$21,902	1a	\$151,830	\$8,665	\$22,672	2a	\$118,826	\$12,312	\$7.47
13002	25	006	\$20,367	3a	\$132,581	\$8,808	\$25,645	4a	\$144,758	\$13,025	\$203.67
13008	1600	001	\$51,155	1b	\$272,151	\$27,428	\$55,728	2b	\$201,138	\$38,192	\$7.99
13011	2000	002	\$208,485	3d	\$1,250,735	\$99,441	\$238,338	4d	\$1,188,194	\$134,746	\$26.06
13012	5000	001	\$23,675	3a	\$137,603	\$11,679	\$30,164	4a	\$148,887	\$17,184	\$1.18
13012		002	\$70,316	3a	\$296,057	\$44,505	\$88,055	4a	\$279,151	\$63,717	\$3.52
13012		003	\$38,664	3b	\$184,388	\$22,588	\$48,568	4b	\$183,216	\$32,594	\$1.93
13012		004	\$85,752	3a	\$339,282	\$56,172	\$107,757	4a	\$314,686	\$80,321	\$4.29
13012		005	\$70,767	3a	\$244,737	\$49,430	\$91,597	4a	\$236,961	\$70,938	\$3.54
13015	2000	001	\$90,907	3a	\$167,148	\$76,335	\$125,793	4a	\$173,175	\$110,695	\$11.36
13015		002	\$69,888	3a	\$167,148	\$55,315	\$95,312	4a	\$173,175	\$80,214	\$8.74
13015		004	\$46,655	3a	\$167,148	\$32,083	\$61,622	4a	\$173,175	\$46,524	\$5.83
13015		55-519944	\$62,144	3a	\$167,148	\$47,571	\$84,082	4a	\$173,175	\$68,984	\$7.77
13015		55-534876	\$24,410	1a	\$155,661	\$10,839	\$25,963	2a	\$121,502	\$15,370	\$3.05
13015		55-543661	\$57,718	3a	\$167,148	\$43,146	\$77,665	4a	\$173,175	\$62,567	\$7.21
13015		55-605026	\$67,675	3a	\$167,148	\$53,102	\$92,103	4a	\$173,175	\$77,005	\$8.46
13019	600	001	\$24,203	3a	\$155,783	\$10,621	\$29,745	4a	\$163,833	\$15,461	\$10.08

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table LO-12	Z. Julilli	ary or Lowe.	si Gost and S	become Lowes	st Cost for fillp	acteu Siliali v	Nater Systems S	pervirig > 10,0	uu Persons		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Ava. Pop.	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
13019	g p.	002	\$24,665	3a	\$155,783	\$11,083	\$30,417	4a	\$163,833	\$16,134	\$10.28
13019		002	\$24,203	3a	\$155,783	\$10.621	\$29,745	4a	\$163,833	\$15,461	\$10.08
13020	175	003	\$22,866	3a	\$152,469	\$9,573	\$28,002	4a	\$161,108	\$13,956	\$32.67
13025	4300	00	\$31,950	3a	\$192,613	\$15,157	\$38,787	4a	\$194,110	\$21,864	\$1.86
13025	+300	002	\$33,466	3a	\$192,613	\$16,673	\$40,974	4a	\$194,110	\$24,051	\$1.95
13025		002	\$33,466	3a	\$192,613	\$16,673	\$40,974	4a	\$194,110	\$24,051	\$1.95
13025		003	\$33,400	3a	\$192,613	\$10,073	\$37,694	4a	\$194,110	\$24,031	\$1.81
13025		005	\$27,316	1a	\$173,446	\$12,194	\$28,853	2a	\$133,921	\$17,178	\$1.59
13025		006	\$34.224	3a	\$173,440	\$17,431	\$42.067	4a	\$194,110	\$25,144	\$1.99
13025		007	\$30,434	3a	\$192,613	\$17,431	\$36,601	4a 4a	\$194,110	\$19,678	\$1.77
13025		007	\$40,974		\$192,613	\$13,042	\$40,974	4a 4a	\$194,110	\$19,676	\$2.38
				4a							
13025	000	009	\$34,224	3a	\$192,613	\$17,431	\$42,067	4a	\$194,110	\$25,144	\$1.99
13027	200	001	\$26,050	3a	\$155,783	\$12,468	\$32,434	4a	\$163,833	\$18,150	\$32.56
13028	28	001	\$20,504	3a	\$132,978	\$8,911	\$25,819	4a	\$145,085	\$13,170	\$183.07
13035	300	55-601619	\$25,537	3a	\$169,042	\$10,799	\$30,886	4a	\$174,733	\$15,652	\$21.28
13038	125	001	\$22,261	3a	\$145,839	\$9,546	\$27,535	4a	\$155,658	\$13,964	\$44.52
13038		002	\$21,116	3a	\$145,839	\$8,401	\$25,859	4a	\$155,658	\$12,289	\$42.23
13039	1500	002	\$37,706	1a	\$198,653	\$20,386	\$41,775	2a	\$151,525	\$28,564	\$6.28
13041	1000	001	\$23,966	1a	\$160,071	\$10,011	\$25,028	2a	\$124,581	\$14,167	\$5.99
13041		002	\$25,804	1a	\$163,874	\$11,517	\$27,368	2a	\$127,237	\$16,275	\$6.45
13041		003	\$22,180	1a	\$152,940	\$8,846	\$22,989	2a	\$119,601	\$12,562	\$5.55
13042	450	001	\$26,672	1a	\$170,874	\$11,774	\$28,118	2a	\$132,125	\$16,599	\$14.82
13044	800	002	\$34,118	3a	\$182,300	\$18,224	\$42,518	4a	\$185,632	\$26,334	\$10.66
13046	2385	00	\$50,093	3a	\$192,509	\$33,310	\$64,965	4a	\$194,025	\$48,049	\$5.25
13046		001	\$41,033	3a	\$165,809	\$26,577	\$53,557	4a	\$172,075	\$38,555	\$4.30
13046		002	\$71,030	3a	\$212,852	\$52,473	\$93,874	4a	\$210,749	\$75,500	\$7.45
13046		003	\$29,341	3a	\$148,167	\$16,423	\$37,730	4a	\$157,572	\$23,993	\$3.08
13046		004	\$48,269	3a	\$167,069	\$33,704	\$63,968	4a	\$173,111	\$48,875	\$5.06
13049	80	001	\$20,542	3a	\$139,873	\$8,347	\$25,403	4a	\$150,753	\$12,259	\$64.19
13049		002	\$28,889	3a	\$139,873	\$16,694	\$37,662	4a	\$150,753	\$24,519	\$90.28
13051	2976	001	\$47,550	3a	\$260,791	\$24,813	\$57,388	4a	\$250,159	\$35,578	\$3.99
13051		002	\$73,669	3a	\$260,791	\$50,932	\$94,838	4a	\$250,159	\$73,028	\$6.19
13051		003	\$54,080	3a	\$260,791	\$31,343	\$66,750	4a	\$250,159	\$44,940	\$4.54
13052	360	001	\$80,245	3a	\$176,997	\$64,814	\$109,563	4a	\$181,272	\$93,759	\$55.73
13055	125	001	\$23,025	3a	\$145,839	\$10,310	\$28,652	4a	\$155,658	\$15,081	\$46.05
13056	125	55-568193	\$20,279	1a	\$140,780	\$8,005	\$21,149	2a	\$111,109	\$11,462	\$40.56
13059	810	001	\$26,800	1a	\$161,207	\$12,745	\$28,959	2a	\$125,374	\$18,028	\$8.27
13060	284	001	\$25,743	3b	\$144,035	\$13,185	\$32,340	4b	\$150,231	\$19,242	\$22.66
13060	-	002	\$33,915	3b	\$160,708	\$19,904	\$43,150	4b	\$163,860	\$28,864	\$29.85
13063	3070	302	\$183,561	3a	\$332,785	\$154,548	\$247,996	4a	\$309,346	\$221,026	\$14.95

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table ES-	12: Summ	ary of Lowe	st Cost and S	secona Lowes	et Cost for Imp	acted Small v	Nater Systems S	serving <10,0	00 Persons		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Ava Pon	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
	Avg. 1 op.				•	•				•	
13063		55-613021	\$51,832	1a	\$271,342	\$28,175	\$56,850	2a	\$202,287	\$39,213	\$4.22
13070	485	001	\$86,542	3a	\$193,570	\$69,666	\$117,470	4a	\$194,897	\$100,478	\$44.61
13070		002	\$39,843	3a	\$193,570	\$22,967	\$50,117	4a	\$194,897	\$33,125	\$20.54
13071	25	001	\$23,809	3b	\$127,846	\$12,663	\$30,652	4b	\$136,997	\$18,708	\$238.09
13071		002	\$30,707	3b	\$128,692	\$19,487	\$40,767	4b	\$137,689	\$28,763	\$307.07
13072	100	001	\$22,372	3a	\$142,525	\$9,946	\$27,913	4a	\$152,933	\$14,579	\$55.93
13075	70	800	\$21,441	3b	\$132,002	\$9,932	\$26,853	4b	\$140,395	\$14,613	\$76.57
13075		009	\$27,236	3b	\$152,251	\$13,962	\$33,986	4b	\$156,946	\$20,303	\$97.27
13077	200	001	\$39,904	3a	\$155,783	\$26,322	\$52,601	4a	\$163,833	\$38,317	\$49.88
13081	1200	001	\$91,725	4a	\$261,321	\$68,942	\$91,725	4a	\$261,321	\$68,942	\$19.11
13084	275	001	\$26,196	3a	\$159,496	\$12,291	\$32,416	4a	\$166,885	\$17,867	\$23.81
13092	200	001	\$73,196	3a	\$262,912	\$50,274	\$94,039	4a	\$251,903	\$72,077	\$91.50
13095	450	001	\$35,770	3a	\$188,930	\$19,299	\$44,514	4a	\$191,082	\$27,854	\$19.87
13100	100	001	\$22,194	3a	\$142,525	\$9,768	\$27,652	4a	\$152,933	\$14,319	\$55.48
13103	300	001	\$32,357	3a	\$169,042	\$17,620	\$40,771	4a	\$174,733	\$25,537	\$26.96
13104	2300	001	\$41,531	3b	\$176,656	\$26,129	\$53,176	4b	\$176,896	\$37,753	\$4.51
13104		002	\$61,347	3b	\$222,566	\$41,943	\$78,968	4b	\$214,424	\$60,273	\$6.67
13104		003	\$32,239	3b	\$153,894	\$18,822	\$41,155	4b	\$158,290	\$27,354	\$3.50
13104		004	\$36,796	3b	\$165,057	\$22,406	\$47,050	4b	\$167,415	\$32,455	\$4.00
13104		005	\$70,629	3b	\$247,937	\$49,012	\$90,822	4b	\$235,163	\$70,319	\$7.68
13105	1324	001	\$36,814	3a	\$217,038	\$17,892	\$44,406	4a	\$214,190	\$25,732	\$6.95
13105		002	\$50,412	3a	\$217,038	\$31,489	\$63,963	4a	\$214,190	\$45,289	\$9.52
13106	3262	001	\$39,210	4b	\$170,624	\$24,334	\$39,210	4b	\$170,624	\$24,334	\$3.01
13106		002	\$50,112	3b	\$206,920	\$32,072	\$63,730	4b	\$201,635	\$46,151	\$3.84
13106		006	\$315,180	4b	\$274,370	\$291,259	\$315,180	4b	\$274,370	\$291,259	\$24.16
13108	750	001	\$32,765	1b	\$181,218	\$16,965	\$35,914	2b	\$138,351	\$23,852	\$10.92
13109	35	001	\$40,265	3a	\$218,364	\$21,227	\$49,295	4a	\$215,280	\$30,526	\$287.61
13113	75	001	\$49,742	3a	\$144,540	\$37,140	\$67,850	4a	\$154,590	\$54,372	\$165.81
13114	1000	001	\$43,045	3a	\$184,367	\$26,971	\$55,292	4a	\$187,331	\$38,959	\$10.76
13114		002	\$31,058	3a	\$146,691	\$18,269	\$40,342	4a	\$156,358	\$26,711	\$7.76
13114		003	\$25,513	3a	\$138,214	\$13,463	\$32,824	4a	\$149,389	\$19,799	\$6.38
13114		004	\$26,513	3a	\$140,569	\$14,258	\$34,123	4a	\$151,325	\$20,930	\$6.63
13114		005	\$65,123	3a	\$258,776	\$42,562	\$82,698	4a	\$248,503	\$61,033	\$16.28
13116	1400	001	\$43.345	4a	\$218.332	\$24,310	\$43,345	4a	\$218,332	\$24.310	\$7.74
13121	450	001	\$54,341	3a	\$188,930	\$37,869	\$71,317	4a	\$191,082	\$54,658	\$30.19
13121		002	\$49,971	3a	\$188,930	\$33,500	\$65,010	4a	\$191,082	\$48,351	\$27.76
13126	200	001	\$20,874	1a	\$147,725	\$7,995	\$21,498	2a	\$115,959	\$11,388	\$26.09
13127	260	001	\$17,658	3a	\$137,514	\$5,669	\$21,316	4a	\$148,814	\$8,341	\$16.98
13138	75	001	\$123,136	3b	\$260,381	\$100,435	\$165,398	4b	\$245,335	\$144,008	\$410.45
13130	1035	001	\$29,130	1a	\$169,207	\$14,378	\$31,697	2a*	\$130,961	\$20,279	\$7.04
13130	1000	001	φ23,130	Ia	φ109,207	φ14,370	कुठ १,०७१		क १७७,७७१	φ20,213	φ1.U 4

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table E3-	ız. Sullilli	ary or Lowe	st Cost and S	secona Lowes	st Cost for Imp	acted Small v	Nater Systems S	serving <10,0	uu Persons		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Ava. Pop.	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
13141	100	002	\$17,287	1a	\$130,005	\$5,953	\$17,663	2a	\$103,585	\$8,632	\$43.22
13141	100	55-524180	\$20,176	1a	\$138,465	\$8.104	\$21,175	2a	\$109,492	\$11,629	\$50.44
13154	25	001	\$16,307	3a	\$132,581	\$4,748	\$19,642	4a	\$144,758	\$7,021	\$163.07
13164	240	001	\$22,115	3a	\$161,087	\$8,071	\$26,389	4a	\$168,193	\$11,726	\$23.04
13184	400	001	\$32,768	3a	\$182,300	\$16,874	\$40,568	4a	\$185,632	\$24,383	\$20.48
13187	800	001	\$32,768	3a	\$182,300	\$16,874	\$40,568	4a	\$185,632	\$24,383	\$10.24
13190	55	001	\$29,427	3a	\$158,185	\$15,636	\$37,195	4a	\$165,807	\$22,740	\$133.76
13192	75	001	\$18,051	3a	\$139,210	\$5,914	\$21,786	4a	\$150,208	\$8,690	\$60.17
13208	25	001	\$18,524	1b	\$135,114	\$6.744	\$18,973	2b	\$106,517	\$9,686	\$185.24
13211	40	55-525590	\$20,470	3a	\$134,569	\$8,738	\$25,656	4a	\$146,393	\$12,893	\$127.94
13215	35	001	\$20,470	3a	\$134,309	\$11,723	\$30,025	4a	\$145,848	\$17,309	\$167.12
13218	25	001	\$17,061	3a	\$133,907		\$20,428	4a 4a	\$148,939	\$7,443	\$170.61
	25	001				\$5,058					
13218			\$16,260	2a	\$104,750	\$7,127	\$16,407	1a	\$131,674	\$4,927	\$162.60
13218	0.5	55-514309	\$17,262	1a	\$131,520	\$5,796	\$17,508	2a	\$104,643	\$8,385	\$172.62
13320	25	001	\$18,716	3a	\$132,581	\$7,157	\$23,203	4a	\$144,758	\$10,583	\$187.16
13340	60	001	\$21,769	3b	\$132,920	\$10,181	\$27,272	4b	\$141,145	\$14,966	\$90.70
13345	75	001	\$16,739	3a	\$129,266	\$5,470	\$20,504	4a	\$142,033	\$8,121	\$55.80
13348	180	001	\$191,302	3a	\$153,131	\$177,951	\$273,432	4a	\$161,653	\$259,338	\$265.70
13351	35	001	\$16,993	1a	\$132,227	\$5,465	\$16,993	1a	\$132,227	\$5,465	\$121.38
13373	320	001	\$21,254	1a	\$149,242	\$8,243	\$21,931	2a	\$117,018	\$11,729	\$16.60
13378	175	001	\$20,690	3a	\$152,469	\$7,397	\$24,830	4a	\$161,108	\$10,784	\$29.56
13408	150	001	\$15,797	3a	\$131,812	\$4,305	\$18,937	4a	\$144,126	\$6,372	\$26.33
13419	210	001	\$21,785	1a	\$148,651	\$8,825	\$22,729	2a	\$116,606	\$12,563	\$25.93
13426	70	001	\$19,367	1a	\$135,687	\$7,537	\$20,225	2a	\$107,553	\$10,848	\$69.17
13435	35	001	\$17,820	1b	\$128,690	\$6,601	\$18,452	2b	\$102,082	\$9,552	\$127.29
13444	6000	007	\$181,971	3a	\$394,438	\$147,582	\$242,198	4a	\$360,030	\$210,809	\$7.58
13470	36	001	\$18,861	3a	\$134,039	\$7,175	\$23,317	4a	\$145,957	\$10,592	\$130.98
13511		001	\$22,767	1b	\$143,679	\$10,241	\$24,408	2b	\$112,431	\$14,606	\$158.11
13513		001	\$22,767	1b	\$143,679	\$10,241	\$24,408	2b	\$112,431	\$14,606	\$158.11
14003	222	001	\$34,467	3b	\$166,749	\$19,929	\$43,572	4b	\$168,797	\$28,855	\$38.81
14014	445	001	\$28,505	1a	\$170,411	\$13,648	\$30,734	2a	\$131,802	\$19,243	\$16.01
14018	420	001	\$27,962	3a	\$184,952	\$11,837	\$33,470	4a	\$187,812	\$17,096	\$16.64
14025	300	001	\$30,084	3a	\$169,042	\$15,346	\$37,476	4a	\$174,733	\$22,242	\$25.07
14032	100	001	\$26,279	3a	\$142,525	\$13,853	\$33,640	4a	\$152,933	\$20,307	\$65.70
14032		002	\$20,240	3a	\$142,525	\$7,814	\$24,788	4a	\$152,933	\$11,455	\$50.60
14098	458	001	\$30,010	3a	\$189,990	\$13,446	\$36,139	4a	\$191,954	\$19,404	\$16.38
14099	793	001	\$28,271	3a	\$181,836	\$12,418	\$34,097	4a	\$185,251	\$17,946	\$8.91
14314	212	001	\$27,483	3a	\$157,374	\$13,763	\$34,420	4a	\$165,141	\$20,022	\$32.41
14322	200	001	\$21,541	1a	\$147,725	\$8,661	\$21,541	1a	\$147,725	\$8,661	\$26.93
14361	50	001	\$26,633	4b*	\$157,934	\$12,863	\$26,633	4b*	\$157,934	\$12,863	\$133.16

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage

Table ES-12: Summary of Lowest Cost and Second Lowest Cost for Impacted Small Water Systems Serving <10,000 Persons

Table E3-	iz. Suillille	ary or Lowe	St Cost and S	econa Lowes	St Cost for imp	acteu Siliali V	water Systems	serving < 10,0	00 Persons		
								Technology			
				Technology		Annual O&M		with Second		Annual O&M	
			Lowest	with Lowest	Capital Cost	Costs for	Second Lowest	Lowest	Capital Cost for	Costs for	Estimated
			Annualized	Annualized	for Lowest	Lowest Cost	Annualized	Annualized	Second Lowest	Second Lowest	Monthly Cost
System ID	Avg. Pop.	POE ID	Cost	Cost	Cost Option	Option	Cost	Cost	Cost Option	Cost Option	Increase
14363	250	001	\$33,819	4b*	\$161,063	\$19,777	\$33,819	4b*	\$161,063	\$19,777	\$33.82
14363		002	\$34.926	4a*	\$159,879	\$20.987	\$34,926	4a*	\$159,879	\$20,987	\$34.93
14399	150	001	\$32,203	3a	\$149,154	\$19,199	\$41,842	4a	\$158,383	\$28,034	\$53.67
14414	300	001	\$44,862	3a	\$169,042	\$30,124	\$58,895	4a	\$174,733	\$43,661	\$37.38
14442	350	001	\$34,587	3a	\$175,671	\$19,272	\$43,595	4a	\$180,182	\$27,886	\$24.71
14505	75	001	\$77,848	3a	\$139,210	\$65,711	\$109,655	4a	\$150,208	\$96,560	\$259.49
15021	250	001	\$27,037	3a	\$162,412	\$12,877	\$33,459	4a	\$169,283	\$18,700	\$27.04
15023	300	001	\$387,023	1a	\$1,461,723	\$259,585	\$448,465	2a	\$1,033,579	\$358,354	N/A
15026	230	005	\$59,355	3a	\$159,761	\$45,426	\$80,597	4a	\$167,103	\$66,029	\$64.52
15029	936	001	\$35,366	3a	\$191,316	\$18,686	\$43,790	4a	\$193,044	\$26,960	\$9.45
15038	200	001	\$20,874	1a	\$147,725	\$7,995	\$21,498	2a	\$115,959	\$11,388	\$26.09
15477	1000	001	\$78,792	3a	\$195,559	\$61,743	\$106,159	4a	\$196,532	\$89,024	\$19.70
20026	170	001	\$22,752	1b	\$150,102	\$9,666	\$23,922	2b	\$116,866	\$13,733	\$33.46
20036	725	001	\$25,514	1a	\$162,772	\$11,322	\$27,032	2a	\$126,467	\$16,006	\$8.80
20068	200	001	\$21,207	1a	\$147,725	\$8,328	\$21,972	2a	\$115,959	\$11,862	\$26.51
20331	2365	001	\$43,658	1a	\$238,702	\$22,847	\$47,515	2a	\$179,492	\$31,866	\$4.61
20405	1232	001	\$34,231	3a	\$210,939	\$15,841	\$41,034	4a	\$209,176	\$22,797	\$6.95
20439	750	001	\$25,376	1a	\$163,929	\$11,084	\$26,758	2a	\$127,275	\$15,662	\$8.46
20478	200	001	\$19,398	3a	\$141,994	\$7,019	\$23,588	4a	\$152,497	\$10,292	\$24.25
20487	200	001	\$21,207	1a	\$147,725	\$8,328	\$21,972	2a	\$115,959	\$11,862	\$26.51
20495	35	001	\$20,786	3a	\$140,721	\$8,518	\$25,706	4a	\$151,450	\$12,502	\$148.47
20549	8900	001	\$66,062	3a	\$297,839	\$40,095	\$81,865	4a	\$280,617	\$57,400	\$1.86
20549		002	\$106,156	3a	\$297,839	\$80,190	\$139,265	4a	\$280,617	\$114,800	\$2.98
20549		003	\$106,156	3a	\$297,839	\$80,190	\$139,265	4a	\$280,617	\$114,800	\$2.98
20549		004	\$106,156	3a	\$297,839	\$80,190	\$139,265	4a	\$280,617	\$114,800	\$2.98
20549		005	\$106,156	3a	\$297,839	\$80,190	\$139,265	4a	\$280,617	\$114,800	\$2.98
20549		006	\$106,156	3a	\$297,839	\$80,190	\$139,265	4a	\$280,617	\$114,800	\$2.98
20549		800	\$106,156	3a	\$297,839	\$80,190	\$139,265	4a	\$280,617	\$114,800	\$2.98
20566	900	001	\$165,850	3b	\$244,071	\$144,571	\$227,690	4b	\$232,003	\$207,463	\$46.07
20583	600	001	\$228,246	3d	\$1,358,195	\$109,833	\$261,368	4d	\$1,290,731	\$148,837	\$95.10
20583		002	\$308,943	3d	\$1,725,189	\$158,534	\$357,926	4d	\$1,640,911	\$214,865	\$128.73
20583		006	\$80,375	3a	\$208,817	\$62,170	\$107,575	4a	\$207,432	\$89,491	\$33.49
20583		009	\$505,938	3d	\$2,747,589	\$266,392	\$589,230	4d	\$2,616,468	\$361,116	N/A
			\$24 100 000		¢100 700 000	\$14 200 000	\$29 300 000		\$103,200,000	\$20,300,000	

\$24,100,000 \$109,700,000 \$14,200,000 \$29,300,000 \$103,200,000 \$20,300,000

^{*} indicates that due to high pH, GFH with pH adjustment was considered the most feasible alternative QNI indicates questionable data N/A indicates industrial water usage